ABSTRACT

The present invention relates to a fabrication method of a semiconductor device using EPD system, which enables uniform hole etching regardless of changes of etch rates of etching chemical and thickness of interlayer insulating layer after CMP, and the fabrication method comprises: forming a nitride layer on an interlayer insulating layer; forming a photoresist layer on the nitride layer, and exposing and developing the photoresist layer to form a photoresist pattern; etching the nitride layer using the photoresist pattern as a mask and contiguously etching the photoresist pattern and the interlayer insulating layer together; setting etch stop point as the point that the photoresist pattern is removed by etching and thus the nitride layer is exposed.